

CLAIMS

I/We claim:

1. A molding machine for blow molding a plastic article comprising:
 - a frame;
 - a mold supported by the frame, the mold having a first mold half and a second mold half, both of the mold halves including surfaces cooperating to form a cavity in the shape of the plastic article;
 - a mold insert located in at least one of the mold halves, the mold insert including a body having a surface that defines a portion of the cavity, the mold insert further including a retention member received interiorly in the one of the mold halves;
 - a locking member supported by the one of the mold halves, the locking member located so as to be engagable with the retention member when the body is received within the one of the mold halves; and
 - a release member supported by the one of the mold halves, the release member being accessible from an exterior of the one of the mold halves without removal of the one of the mold halves from the molding machine and adapted to disengage the locking member from the retention member whereby the mold insert is removable from the one of the mold halves.
2. The molding machine according to claim 1, wherein the release member is movable between a retracted and an extended position, during movement

into the retracted position the release member causes the locking member to disengage from the retention member.

3. The molding machine according to claim 1, wherein the release member is movable between a retracted position and an extended position, during movement into the extended position the release member causes the locking member to disengage from the retention member.

4. The molding machine according to claim 3, wherein the release member is threaded.

5. The molding machine according to claim 1, wherein the locking member includes a spring biasing the locking member toward engagement with the retention member.

6. The molding machine according to claim 1, wherein the locking member engages a recess in the retention member.

7. The molding machine according to claim 6, wherein the recess is a circumferential groove around the retention member.

8. The molding machine according to claim 1, wherein the release member applies force directly to the locking member causing it to disengage from the retention member.

9. The molding machine according to claim 8, wherein the release member is coupled to the locking member.

10. The molding machine according to claim 1, further comprising a biasing member located within the one of the mold halves and adapted to bias the body away from the one of the mold halves when the locking member is disengaged from the retention member.

11. A mold assembly for blow molding a plastic article, comprising:
a mold having a first mold half and a second mold half, both of the mold halves including surfaces cooperating to form a cavity in the shape of the plastic article;

a mold insert located in at least one of the mold halves, the mold insert including a body having a surface that defines a portion of the cavity, the mold insert further including a retention member received interiorly in the one of the mold halves;

a locking member supported by the one of the mold halves, the locking member located so as to be engagable with the retention member when the body is received within the one of the mold halves; and

a release member supported by the one of the mold halves, the release member being accessible from an exterior of the one of the mold halves without disassembly of the one of the mold halves and adapted to disengage the locking member from the retention member whereby the mold insert is removable from the one of the mold halves.

12. The mold assembly according to claim 11, wherein the release member is moveable between a retracted position and an extended position, during movement into the retracted position the release member causes the locking member to disengage from the retention member.

13. The mold assembly according to claim 11, wherein the release member is movable between a retracted position and an extended position, during movement into the extended position the release member causes the locking member to disengage from the retention member.

14. The mold assembly according to claim 13, wherein the release member is threaded.

15. The mold assembly according to claim 11, wherein the locking member includes a spring biasing the locking member toward engagement with the retention member.

16. The mold assembly according to claim 11, wherein the locking member engages with a recess in the retention member.

17. The mold assembly according to claim 16, wherein the retaining member is generally cylindrical and the recess is a circumferential groove around the retention member.

18. The mold assembly according to claim 11, wherein the release member applies force directly to the locking member causing it to disengage from the retention member.

19. The mold assembly according to claim 18, wherein the release member is coupled to the locking member.

20. The mold assembly according to claim 11, further comprising a biasing member located within the one of the mold halves and adapted to bias the body away from the one of the mold halves when the locking member is disengaged from the retention member.